

MISCELLANEOUS.

ON A WHITE VARIETY OF THE HYACINTH AND COLUMBINE.

Pontypool, July 16, 1840.

SIR,—I have to apologize for having so long delayed the remainder of my communication upon spontaneous generation, but having been rather fully engaged since the first part of it was inserted, I have not been able to transcribe it: I hope to be able to send it in about a week or ten days, so that I am afraid it will be too late for the next Number.

In addition to the white varieties of plants mentioned by Mr. Adams in the last Number, I have observed in this neighbourhood white varieties of the common Hyacinth and Columbine (*Aquilegia*): the whole plant of the latter varies very much in colour from the proper plant, being wholly of a light green, and possessing none of the purplish-brown shade on the stems, so conspicuous in its normal state, so that they may easily be known when not in flower. I have seen large bushes of it growing within a few yards of the other variety.

I remain, yours most respectfully,

JAMES BLADON.

P.S. The species of Crane Fly alluded to is a species of *Trichocera*, according to Mr. Westwood, from whom I have received a letter to that effect; he has also mentioned it in his "Introduction."

ON A SPECIES OF BALÆNOPTERA STRANDED ON CHARMOUTH BEACH.

Charmouth, Dorset, 9th July, 1840.

SIR,—My communication to Mr. Charlesworth respecting a species of Balænoptera stranded on Charmouth beach, which appears in your Magazine of Natural History of the 1st of July, should have been corrected by my second letter to him on the same subject previously to its being published. In my second communication I requested that the paragraph stating "that two small bones representing the pelvis in quadrupeds were attached (one on each side) to the first caudal vertebra," should be omitted, *as no such bones exist*; my second letter also contained several particulars respecting the sternum, os hyoides, bones of the spine, &c., which should have been incorporated with the first account, as it would have rendered it more complete and correct.

I gave as my chief reason for believing "that our species differed from those previously described," the circumstance of its possessing only *sixty vertebrae*, the others having sixty-two; a more particular and careful investigation has convinced me that *two* of the small caudal bones have been lost, making the whole number sixty-two, and I am now convinced that it is nothing more or less than a small specimen of the species stranded at Ostend some years ago, and exhibited in London, viz. the Rorqual "*Balænoptera boops*."

Yours, &c.,

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ON HYBRID PHEASANTS.

Farnham, July 11th.

DEAR SIR,—I have lately mounted a brace of hybrid Pheasants, and have been requested to forward a memorandum to you; if it is any way interesting, you are welcome to make use of it. I believe there is not an instance mentioned as having occurred in a wild state, at least I have been so informed.

The keeper of Henry Halsey, Esq., of Henley Park, two years ago hatched a hen Golden Pheasant with a brood of common Pheasants, and allowed her to take to the woods with the others; the result has been two beautiful hybrids, with the characters of the two species so beautifully combined, that the most casual observer would not fail to perceive it at first sight: they have not the bright markings of the common Pheasant, nor the gorgeous colours of the Golden Pheasant; but they present the more sombre tints of the two.

They were shot by Henry Halsey, Esq. at the latter end of January, and are now in his possession.

Yours respectfully,

JAMES LOWCOCK.

ON A SPECIMEN OF THE SHEARWATER PETREL, KITE, &c.

Chipping Norton, Oxon, July 9th, 1840.

SIR,—A fine specimen of the Roller (*Coracias Garrula*) has lately come under my notice, which was shot in the end of June, 1839, by the gamekeeper, on the Guiting estate, Gloucestershire; and in September last a specimen of the Shearwater Petrel (*Puffinus Anglorum*) was taken within this parish. The bird rose from the ground, but being unable to fly far, was soon captured and brought to me alive; I endeavoured to feed it, but after nearly two days, during which it appeared to have taken no food, I killed and stuffed it. The bird made good use of its bill and wings in self defence, making at the same time a loud breathing or hissing noise.

The Kite (*Milvus regalis*) is become a rare bird. I have recently obtained a specimen shot on December 29, 1838, about eight miles from hence, in the vicinity of Stow. The bird had frequented the neighbourhood several days, and shots were fired at it, but to no purpose, till at last it was seen by a boy to fly into a plantation at the bottom of Stow Hill; he hastened up to the town and informed the parties who had previously been in pursuit, and on their arrival at the place it was shot whilst perched at roost.

The third volume of Mr. Macgillivray's 'History of British Birds' has just reached me; it is a most excellent work, and I would recommend every ornithological student to procure a copy. There are other prettily and beautifully illustrated works, but this, in my opinion, for the accuracy and minuteness of its detailed descriptions, is scarcely to be excelled; the "Lessons," too, of this practical ornithologist, together with the author's account of his rambles "o'er moor and mountain," in company and alone, with other valuable

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features, are highly entertaining and instructive. I sincerely hope the publishers will let us have the remaining portion of the work—the Water birds—with as little delay as possible, for the author's valuable experience with this tribe, advantageously located as he is, must prove exceedingly useful.

Wild Geese (I cannot say what species) were seen in this neighbourhood on June 16; thirteen appeared in the flight. This appears unusually early, supposing them to be a brood of the present year.

THOMAS GOATLEY.

NOTES ON BRITISH BIRDS.

To the Editors of the Annals and Magazine of Natural History.

The GOSHAWK.—Of this handsome bird I kept three specimens in the year 1837: two were females, and at least one-third larger and stronger than the male. The young Hawk for some time after birth is covered with a thick white down in place of feathers, and, upon the whole, much resembles a young Turkey. Until four or five months old it does not stand erect, but holds the head low, rounding the back like a Guinea-fowl. The cry, which is easily excited, resembles a quick shrill repetition of the letter P, pe-pe-pe-pe-pe. Whilst the bird is young its fæces are ejected with surprising force, even to the distance of eight or nine feet.

When a bird was placed near the bars of the cage in which they were confined, one of the Hawks would rush up to it, and dashing into it a claw, drag it to one corner of the cage, extending his wings round it to prevent the approach of the others. This, however, was somewhat difficult; and often, when the devourer least expected it, his *bonne bouche* was snatched from him by another, who had perhaps relinquished his own piece for the purpose. Howbeit the loser never appeared incensed at the theft.

When presented with a living bird, the Hawk invariably seizes it round the neck with his talons, and begins devouring the head, regardless of the cries and struggles of its victim. The pressure on the neck and blows on the skull quickly cause death, and the Hawk begins feeding with such hearty good will, that in a few minutes nothing remains but a few feathers.

FRAGILITAS OSSIUM (?) in the KESTREL.—In the year 1837 I purchased a young Kestrel of a boy from Wilcot. I was at the time surprised at the peculiarity of its shape, and the difficulty it experienced in walking. Its appetite was voracious, and it was exceedingly tame. When fully fledged, it was suddenly seized with violent spasms; the leg being thrown over the back, and the wings drawn forwards over the breast. It appeared in great pain, but was very hungry. It continued in this state two days, when I killed it.

On examining the body I found nearly every bone dislocated or fractured, and rather softer than usual, containing less earthy matter. One femur had been broken in *five* places, the tibia in *four*; indeed, there were upwards of twenty recent or partially united

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fractures in the long bones ; the legs were greatly distorted and the spine crooked.

I am unable to account for the origin of the disease in this bird ; it had been reared with several other young Hawks, and had lived chiefly on young unfledged birds, mice, &c. &c.

The KINGFISHER.—Of this beautiful, but stupid bird, I have had nine living specimens ; seven young and two adult.

On April 14, 1837, a boy brought me a living female Kingfisher, which he had taken on the nest in the act of laying an egg, which I found on dissection covered with the shell and ready for expulsion. I immediately proceeded with him to the spot where the nest was found, for the purpose of examining its structure. It was formed in a hole about a foot in depth, which had been excavated in a bank overhanging a narrow brook. It was concealed from view by a tuft of long grass ; but as the male bird was constantly sitting on a branch near the nest, the accumulation of fæces led to the discovery of the place of its concealment.

The nest itself was large and of peculiar structure, being composed exclusively of the exuviae of the small fish it had devoured, mixed with fins, scales, &c., and the skins and legs of a little insect somewhat resembling a shrimp, which adheres to stones, &c. in running water.

Of this substance there was about sufficient to fill a pint cup. I preserved it, and possess some at the present time. The interior cavity is small : the eggs, of which I have four, are white, round, of moderate size, and six or seven in number.

In the spring of 1837, a boy brought me four young Kingfishers, half-fledged, which he had just taken from a nest near the same spot. I kept them two months, feeding them exclusively on fish, and washing them in lukewarm water daily. Under this treatment they thrived in a remarkable manner, and the plumage became as clear and brilliant as in a state of nature. They were indeed generally admired, but I was at length compelled to give them away on account of the great care and time I was obliged to devote to them.

The young Kingfisher is a very stupid and inactive bird. It will stand in the same posture one or two hours without moving a muscle, and its enjoyments seem concentrated in the narrow circle of eating and sleeping. On touching the extremity of the bill it opens its mouth, and after swallowing the morsel gravely closes it again, and looks round with laughable slowness for a second mouthful. It will swallow without inconvenience a minnow or loach half its own weight, and in the course of the day will devour ten or twelve such. It is very tame, readily standing on the finger to be fed. It casts up the bones and fins of the fishes in the form of a pellet like the Owl and Hawk, and of these pellets its nest is formed. The adult Kingfisher is very intractable, and refuses to eat when in captivity. On the whole, the Kingfisher is only tolerable on account of the beauty of its plumage.

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ON THE DISCOVERY OF *HYPERICUM LINEARIFOLIUM* IN ENGLAND.

Hypericum linearifolium was found by the Rev. Thomas Hincks of Cork, among granite rocks near the banks of the Teign, Devon, in the summer of 1838. Specimens are in his own collection and in that of the Rev. William Hincks, F.L.S. of London, who lately ascertained the species in looking over that part of his herbarium.

The same plant is amongst Mr. Babington's acquisitions in Jersey (see *Annals*, vol. ii. p. 348.), but it is interesting to know that it is also found in England, and it is somewhat curious that so conspicuous a plant has been so long overlooked.

TEMPERATURE OF VEGETABLES.

I have to thank M. Van Beck for the eagerness with which he has repeated my experiments on the peculiar heat of vegetables. His verification of the existence of this heat and of its diurnal period places these facts in the number of those which may take a definitive place in science, which, generally speaking, admits only that which has been seen by more than one observer.

M. Van Beck differs from me relative to a single fact of very little importance. I mentioned, that upon placing in the open air as a comparative experiment, part of a living vegetable and a similar part dead, the latter always appeared colder than the former: M. Van Beck constantly obtained an opposite result. This opposition in the results of our observations is perhaps caused by a difference in the mode in which our experiments were prepared. M. Van Beck plunged, as I did, the portion of vegetable which he meant to deprive of life into very hot water; perhaps he then let it grow cold in the open air, and thus lose by evaporation a part of the water which moistened its surface; whereas I cooled it by immersion in cold water, and it was thus completely soaked with water when I made the experiment.

It will be seen that there must be more evaporation from it than the less moist living vegetable portion, and that consequently, it would necessarily be colder, whilst an opposite result might be obtained when the vegetable portion, killed by the hot water, had been able to evaporate the excess of water, which it had gained by remaining some time in the open air. Perhaps, also, the peculiar nature of the vegetable parts may have an influence upon the difference of the results in question.—*Note of M. Dutrochet on M. Van Beck's observations on the Temperature of Plants, Comptes Rendus*, Jan. 13.

MICROGRAPHY—NEW OBSERVATIONS ON THE INFUSORIA OF ROCK SALT.

In the 'Comptes Rendus' mention is made of a note received by the Academy of Sciences from M. Marcel de Serres relative to the observations which he is making on this subject along with M. Joly.

In the specimens of rock salt of a tolerably decided greenish colour brought from Cardona (Spain), the infusoria appear more rare, smaller, and less distinct than in the specimens of a red colour before examined.

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previous observations on the change of tint which the infusoria that colour our salt marshes undergo by age. These animalcules, which are white at their birth, become green in their middle age, and do not till their adult age take the purple tint which makes them so remarkable. In general the green infusoria are not so often seen as the red in salt marshes, which seems to indicate that these monads remain but a short time in their middle state.

We have found the same infusoria in the argilo-calcareous marls which are found at Cardona beneath the rock salt. There they have their beautiful purple tint, but they are in too small numbers to communicate it to the mass of marl which has remained grayish. This fact also proves, that in the ancient world, as in the present one, the animalcules were precipitated after their death to the bottom of the waters in which they previously lived.—*Comptes Rendus*, Mar. 16.

ON THE GENUS *PUPINA*. BY JOHN EDW. GRAY, ESQ.

The shell of this very curious and interesting genus has been placed by different authors in very different parts of the system, some persisting that it should be arranged with the marine genera on account of the grooves on the left side of the mouth. From a specimen which Mr. Powis has very kindly given to me, I have no doubt in my own mind that it is a very distinct genus of *Cyclostomida*, for this specimen has a horny orbicular many-whorled operculum as large as the mouth of the shell, exactly resembling the opercula of some of the genera of that family. The polished surface of the shell and the form of the notch is very unlike any that I have hitherto observed among the shells of marine mollusca. The latter is peculiar, as being funnel-shaped, wider outwards, and narrowed into a slit within, and only appears as a narrow simple groove on the outer surface of the peristome.

I am acquainted with two species of this genus; one *Pupina fusca*, small, pale brown, with a yellowish white peristome; and the other, *Pupina grandis*, twice the size of the former, more ventricose, and of a bright yelk yellow colour; there is a fine specimen of the latter species in the cabinet of Mr. Stainforth. I suspected that this genus should be referred to the family of *Cyclostomida* directly I had seen the animal and operculum of Mr. Guilding's genus *Megalomastoma*; but from the rarity of these shells, I had little hope of so soon being able to get the additional information furnished by the operculum, which was alone wanted to clear up the doubt. I have lately seen another shell which has the polished surface, mouth and operculum of this genus, but is destitute of the groove, and must form another genus of this family, for which I propose the name of *Callia*.—J. E. GRAY.

ON THE BYSSUS OF UNIO. BY JOHN G. ANTHONY, ESQ.—WITH NOTES,
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This account is curious in several particulars; first, as showing the relations of these animals to the family of *Arcadæ*; second, as showing what I have long expected from the observations I have made on some marine gasteropodous mollusca,—that many, if not most of the kinds, have the power of forming a byssus when it can assist them in their habits. It is very desirable, however, that the place where the byssus is attached to the animal should be re-examined, for if it takes its origin from the mantle, it is an anomaly in the organization of mollusca. It always arises, as far as I am aware, from some part of the foot, in general from the anterior part of the base, as in *Mytilus*, *Pinna*, *Avicula*, *Pecten*, &c., but sometimes from the end of this organ, as in *Arca*, from whence also, I should suspect, it most probably arises in the *Uniones*.—J. E. GRAY.

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To the Editors of the Annals and Magazine of Natural History.

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In the Journal of the Asiatic Society of Bengal, No. 89, for May, 1839, Mr. Evans has published his Notes on the Anatomy of the *Arctonyx collaris*, which tend to show that this animal is closely allied to the Badger, and should occupy the situation in which I have placed it in my classification. *Arctonyx* and *Mydaus* I can but regard as subgenera of *Meles*.—G. R. WATERHOUSE.

Zoological Society, Aug. 27, 1840.

RETURN OF MR. GOULD.

We have much pleasure in announcing the safe arrival of our scientific friend Mr. Gould, the celebrated ornithologist, from Australia, after an absence of two years and a half, which he has devoted to the investigation of the habits and œconomy of the animals of that portion of the globe. His collections, we understand, are very extensive; and among other interesting materials brought home for the purpose of illustrating his work on the Birds of Australia, are the nests and eggs of a great portion of the species.

METEOROLOGICAL OBSERVATIONS FOR JULY, 1840.

Chiswick.—July 1. Overcast: boisterous. 2. Rain, with strong wind. 3. Cloudy and fine. 4. Very fine. 5. Cloudy: windy. 6, 7. Fine. 8. Fine: heavy rain. 9—12. Very fine. 13—17. Fine. 18. Overcast. 19. Cloudy: rain. 20. Heavy showers. 21. Very fine: rain. 22. Fine. 23. Cloudy. 24. Overcast and fine: rain. 25. Showery. 26. Cloudy: fine. 27. Fine. 28. Hazy. 29. Very fine. 30. Cloudy: rain. 31. Very fine.

Boston.—July 1, 2. Rain. 3. Stormy. 4. Fine: rain early A.M.: rain A.M. 5. Fine: rain A.M. 6. Cloudy: rain P.M. 7. Cloudy: rain early A.M.: rain P.M. 8. Cloudy: rain P.M. 9. Cloudy. 10. Cloudy: rain P.M. 11—13. Cloudy: rain A.M. and P.M. 14, 15. Fine. 16. Rain: rain early A.M. 17. Fine. 18, 19. Cloudy: rain P.M. 20. Fine. 21. Fine: rain P.M. 22. Fine. 23, 24. Cloudy. 25. Rain: thunder and lightning with rain P.M. 26. Cloudy. 27. Fine. 28. Cloudy: rain A.M. 29. Fine. 30. Cloudy. 31. Fine.

Applegarth Manse, Dumfries-shire.—July 1. Heavy rain A.M.: cleared up P.M. 2. Drizzling all day. 3. Heavy rain all day. 4. Fair till 4 P.M. then wet. 5. Showery: fair evening. 6. Rainy. 7, 8. Showery: thunder. 9. Fair all day. 10. Showery. 11. Warm: a single shower: thunder. 12. Very wet. 13. Fine dry day. 14. Wet afternoon. 15. Very wet all day. 16, 17. Occasional showers. 18. Fair till afternoon, then wet. 19. Rain early A.M.: cleared up. 20. Fair all day. 21. Heavy showers all day: thunder. 22. Fair all day. 23. Fair till evening, then rain. 24. Showery all day. 25. Showery afternoon. 26—30. Fair all day. 31. The same: a few drops P.M.

Sun shone out 29 days. Rain fell 22 days. Thunder 3 days.

Wind north $\frac{1}{2}$ day. North-north-east $\frac{1}{2}$ day. East-north-east 1 day. East 1 day. South-east $\frac{1}{2}$ day. South 4 days. South-west 8 days. West-south-west 3 days. West 7 days. North-west $2\frac{1}{2}$ days. North-north-west 3 days.

Calm 11 days. Moderate 12 days. Brisk 4 days. Strong breeze 2 days. Boisterous 1 day. Variable 1 day.

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We have much pleasure in announcing the safe arrival of our scientific friend Mr. Gould, the celebrated ornithologist, from Australia, after an absence of two years and a half, which he has devoted to the investigation of the habits and œconomy of the animals of that portion of the globe. His collections, we understand, are very extensive; and among other interesting materials brought home for the purpose of illustrating his work on the Birds of Australia, are the nests and eggs of a great portion of the species.

METEOROLOGICAL OBSERVATIONS FOR JULY, 1840.

Chiswick.—July 1. Overcast: boisterous. 2. Rain, with strong wind. 3. Cloudy and fine. 4. Very fine. 5. Cloudy: windy. 6, 7. Fine. 8. Fine: heavy rain. 9—12. Very fine. 13—17. Fine. 18. Overcast. 19. Cloudy: rain. 20. Heavy showers. 21. Very fine: rain. 22. Fine. 23. Cloudy. 24. Overcast and fine: rain. 25. Showery. 26. Cloudy: fine. 27. Fine. 28. Hazy. 29. Very fine. 30. Cloudy: rain. 31. Very fine.

Boston.—July 1, 2. Rain. 3. Stormy. 4. Fine: rain early A.M.: rain A.M. 5. Fine: rain A.M. 6. Cloudy: rain P.M. 7. Cloudy: rain early A.M.: rain P.M. 8. Cloudy: rain P.M. 9. Cloudy. 10. Cloudy: rain P.M. 11—13. Cloudy: rain A.M. and P.M. 14, 15. Fine. 16. Rain: rain early A.M. 17. Fine. 18, 19. Cloudy: rain P.M. 20. Fine. 21. Fine: rain P.M. 22. Fine. 23, 24. Cloudy. 25. Rain: thunder and lightning with rain P.M. 26. Cloudy. 27. Fine. 28. Cloudy: rain A.M. 29. Fine. 30. Cloudy. 31. Fine.

Applegarth Manse, Dumfries-shire.—July 1. Heavy rain A.M.: cleared up P.M. 2. Drizzling all day. 3. Heavy rain all day. 4. Fair till 4 P.M. then wet. 5. Showery: fair evening. 6. Rainy. 7, 8. Showery: thunder. 9. Fair all day. 10. Showery. 11. Warm: a single shower: thunder. 12. Very wet. 13. Fine dry day. 14. Wet afternoon. 15. Very wet all day. 16, 17. Occasional showers. 18. Fair till afternoon, then wet. 19. Rain early A.M.: cleared up. 20. Fair all day. 21. Heavy showers all day: thunder. 22. Fair all day. 23. Fair till evening, then rain. 24. Showery all day. 25. Showery afternoon. 26—30. Fair all day. 31. The same: a few drops P.M.

Sun shone out 29 days. Rain fell 22 days. Thunder 3 days.

Wind north $\frac{1}{2}$ day. North-north-east $\frac{1}{2}$ day. East-north-east 1 day. East 1 day. South-east $\frac{1}{2}$ day. South 4 days. South-west 8 days. West-south-west 3 days. West 7 days. North-west $2\frac{1}{2}$ days. North-north-west 3 days.

Calm 11 days. Moderate 12 days. Brisk 4 days. Strong breeze 2 days. Boisterous 1 day. Variable 1 day.

the lower jaw, approach the Cats, and in my opinion should therefore be placed at the opposite extremity of the *Viverridæ*, the *Herpestes* group being apparently most nearly related to the Dogs. *Galidia* and *Galidictis* also approach the Cats in having the muzzle proportionately shorter than the other *Viverridæ*, and in having the true molars smaller. The genus *Galidia* appears to be scarcely sufficiently distinct from Mr. Bennett's genus *Cryptoprocta*.

In the Journal of the Asiatic Society of Bengal, No. 89, for May, 1839, Mr. Evans has published his Notes on the Anatomy of the *Arctonyx collaris*, which tend to show that this animal is closely allied to the Badger, and should occupy the situation in which I have placed it in my classification. *Arctonyx* and *Mydaus* I can but regard as subgenera of *Meles*.—G. R. WATERHOUSE.

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Calm 11 days. Moderate 12 days. Brisk 4 days. Strong breeze 2 days. Boisterous 1 day. Variable 1 day.

Days of Month, 1840. July.	Barometer.				Thermometer.						Wind.				Rain.			Dew point. Lond.: Roy. Soc. 9 a.m.				
	Lond.: Roy. Soc. 9 a.m.	Chiswick.		Boston. 8½ a.m.	Dumfries-shire.		Lond.: Roy. Soc.		Chiswick.		Boston. 8½ a.m.	Dumfries-shire.		Chiswick. 1 p.m.	Bost. shire.	Dum- fries. shire.	Lond.: Roy. Soc. 9 a.m.		Chiswick.	Boston.	Dumfries.	
		Max.	Min.		9 a.m.	8½ p.m.	Fahr. 9 a.m.	Self-register.		Max.		Min.	Max.									Min.
								Max.	Min.													
1.	29.922	29.985	29.809	29.30	29.40	29.60	62.0	68.2	52.4	68	58	56	61	50	s.	sw.	nbyw.	133	0.1	...	58	
2.	29.774	29.739	29.544	29.23	29.54	29.31	61.2	66.6	59.6	66	55	54	59½	46½	se.	sw.	sw.	033	0.2	30	58	
3.	29.540	29.708	29.543	28.90	29.12	29.35	58.8	66.5	56.7	68	51	62	56	46	w.	w.	w.	080	...	16	58	
4.	29.878	29.810	29.676	29.26	29.55	29.44	61.3	69.2	53.7	72	56	58	59½	47	w.	w.	nw.	...	10	...	54	
5.	29.732	29.710	29.681	29.13	29.34	29.45	63.3	68.6	58.7	69	50	63	60	49	sw.	w.	w.	...	02	...	56	
6.	29.810	29.767	29.643	29.20	29.42	29.19	62.6	75.3	53.3	67	49	62	59	48½	s var.	sw.	w.	ws.	016	14	187	
7.	29.634	29.718	29.536	29.00	29.33	29.48	59.7	71.7	50.6	71	51	53	61	48	w.	w.	w.	138	83	...	55	
8.	29.822	29.764	29.625	29.26	29.49	29.50	61.2	66.3	53.8	66	48	60	59	50	sw.	w.	w.	025	46	0.6	55	
9.	29.878	29.928	29.798	29.19	29.64	29.73	59.4	67.3	51.3	68	48	60	55	47	nw.	nw.	w.	500	05	...	53	
10.	29.996	29.946	29.893	29.30	29.74	29.79	60.3	67.7	51.3	67	50	60	63	50	w.	nw.	nw.	...	...	...	53
11.	30.002	29.936	29.924	29.42	29.81	29.82	60.2	66.8	52.6	68	46	56	61½	49	nw.	nw.	n.	...	04	...	54	
12.	30.012	29.949	29.905	29.43	29.84	29.85	58.3	69.2	52.2	65	42	55	57½	48	nw.	w.	calm	...	41	...	53	
13.	30.012	30.033	29.950	29.46	29.95	30.04	55.7	62.7	49.4	62	41	56	59	43	nw.	ne.	n.	...	07	...	53	
14.	30.316	30.269	29.942	29.70	30.09	30.04	59.4	70.5	50.2	74	55	59	59½	40½	sw.	sw.	calm	...	05	1.80	50	
15.	30.304	30.235	30.137	29.62	29.93	29.87	63.7	77.2	57.0	80	48	65	59	51½	s.	s.	calm	...	...	...	54
16.	30.152	30.101	29.919	29.50	29.83	29.71	66.5	74.3	56.0	79	46	58	61	51	sw var.	s.	calm	...	10	...	56	
17.	29.998	29.909	29.889	29.36	29.61	29.52	62.7	74.6	52.8	75	56	62	58½	49½	w.	w.	ws.	...	03	...	60	
18.	29.778	29.735	29.717	29.18	29.56	29.45	63.7	68.6	58.7	69	49	61	63	53	w.	w.	calm	...	...	...	60
19.	29.700	29.662	29.470	29.05	29.34	29.30	63.7	68.6	58.7	69	49	61	63	53	s.	s.	s.	...	06	0.4	60	
20.	29.566	29.511	29.441	28.94	29.24	29.30	63.3	70.0	53.2	69	51	63	53	53	s var.	sw.	sw.	091	10	...	58	
21.	29.630	29.646	29.563	29.00	29.35	29.50	63.7	70.0	55.3	74	47	63	54	50½	w var.	sw.	w.	066	09	...	59	
22.	29.820	29.844	29.757	29.22	29.62	29.70	61.4	70.2	52.7	69	49	60	62	50½	w.	sw.	nw.	305	01	0.4	56	
23.	30.032	30.013	29.981	29.43	29.78	29.82	59.7	72.4	53.5	65	51	56	59½	50	w.	w.	w.	...	...	...	52
24.	30.066	29.993	29.906	29.50	29.74	29.67	61.7	64.5	55.0	66	56	58	58	49	s.	sw.	w.	...	02	...	54	
25.	29.814	29.774	29.646	29.24	29.58	29.59	60.3	67.4	58.5	67	54	58	64	51	s.	sw.	sw.	016	22	0.7	58	
26.	29.694	29.739	29.627	29.16	29.70	29.78	58.8	70.0	56.3	66	54	61	66	53	se.	ne.	calm	291	05	0.4	56	
27.	29.956	29.926	29.745	29.37	29.79	29.75	61.0	62.4	55.3	70	49	64	64	50½	nw.	sw.	calm	105	...	...	58
28.	30.084	30.078	30.019	29.47	29.84	30.00	61.7	71.4	55.6	74	58	63	65	55	s.	w.	calm	...	01	...	57	
29.	30.260	30.171	30.134	29.63	30.08	30.04	64.7	71.8	60.2	75	54	65	66	45½	nw.	nw.	calm	...	03	...	61	
30.	30.148	30.095	30.029	29.47	29.90	29.93	65.4	72.0	60.2	69	51	62	65	58½	ssw.	sw.	calm	...	05	...	57	
31.	34.210	30.159	30.126	29.59	30.01	30.06	62.3	73.2	58.7	70	45	62	65	61	nw.	nw.	nw.	016	...	...	60
Mean.	29.921	29.898	29.780	29.30	29.650	29.644	61.5	69.8	54.9	69.35	50.77	59.9	61.1	49.4	Sum.	1.68	2.76	5.28	Mean. 56.
																			1.815			

Days of Month, 1840, July.	Barometer.				Thermometer.						Wind.				Rain.			Dew point. Lond.: Roy. Soc. 9 a.m.		
	Lond.: Roy. Soc. 9 a.m.	Chiswick.		Boston. 8½ a.m.	Dumfries-shire.		Fahrr. 9 a.m.	Lond.: Roy. Soc. Self-register.		Chiswick.	Dumfries-shire.		Lond.: Roy. Soc. 9 a.m.	Chiswick.	Dumfries-shire.	Boston.				
		Max.	Min.		9 a.m.	8½ p.m.		Max.	Min.		Max.	Min.								
1.	29.922	29.985	29.809	29.30	29.40	29.60	62.0	68.2	52.4	68	58	56	61	50	sw.	nw.	...	.133	...	58
2.	29.774	29.739	29.544	29.23	29.54	29.35	61.2	66.6	59.6	66	55	54	59½	46½	sw.	calm	.30	.02	...	58
3.	29.540	29.708	29.483	28.90	29.12	29.35	58.8	66.5	56.5	68	51	62	56	50½	w.	w.	.16	.03	...	58
4.	29.878	29.810	29.676	29.26	29.55	29.44	61.3	69.2	53.7	72	56	58	59½	47	w.	w.	.10	...	...	54
5.	29.732	29.710	29.681	29.13	29.34	29.45	63.3	68.6	58.7	69	50	63	60	49	sw.	w.	.02	...	...	56
6.	29.810	29.767	29.434	29.20	29.42	29.19	62.6	75.3	53.3	67	49	62	59	48½	s var.	w.	.14	.02	1.87	55
7.	29.634	29.718	29.536	29.00	29.33	29.48	59.7	71.7	50.6	71	51	53	61	48	sw.	w.	.06	.02	...	55
8.	29.822	29.764	29.625	29.26	29.49	29.50	61.2	66.3	53.8	66	48	60	59	50	sw.	w.	.06	.02	...	55
9.	29.878	29.928	29.798	29.19	29.64	29.73	59.4	67.3	51.3	68	48	60	59	50	nw.	nw.	.05	...	...	53
10.	29.996	29.946	29.893	29.30	29.74	29.79	60.3	67.7	51.3	67	50	60	63	50	w.	nw.	.04	...	...	53
11.	30.002	29.936	29.924	29.42	29.81	29.82	60.2	66.8	52.6	68	46	56	61½	49	nw.	w.	.04	...	...	54
12.	30.012	29.949	29.905	29.43	29.84	29.85	58.3	69.2	52.2	65	42	55	57½	48	nw.	ENE.	.41	...	...	53
13.	30.012	30.033	29.950	29.46	29.95	30.04	55.7	62.7	49.4	62	41	56	59	43	nw.	calm	.07	...	...	53
14.	30.316	30.269	29.942	29.70	30.09	30.04	59.4	70.5	50.2	74	55	59	59½	40½	sw.	calm	.05	.05	1.80	50
15.	30.304	30.235	30.137	29.62	29.93	29.87	63.7	77.2	57.0	80	48	65	59	51½	s.	w.	.10	...	...	54
16.	30.152	30.101	29.919	29.50	29.83	29.71	66.5	74.3	56.0	79	46	58	61	51	s.	calm	.03	...	...	56
17.	29.998	29.909	29.889	29.36	29.61	29.52	62.7	74.6	52.8	75	56	62	58½	49½	sw.	sw.	.03	...	...	55
18.	29.778	29.735	29.717	29.18	29.56	29.45	63.7	69.7	58.0	70	56	64	61½	45	w.	calm	.06	.06	...	60
19.	29.700	29.662	29.470	29.05	29.34	29.30	63.7	68.6	58.0	69	49	61	63	53	s.	s.	.04	.04	...	60
20.	29.566	29.511	29.441	28.94	29.24	29.30	63.3	70.0	53.2	69	51	63½	63½	53	s var.	sw.	.09	.09	...	58
21.	29.630	29.646	29.563	29.00	29.35	29.30	63.7	70.0	55.3	74	47	63½	64	50½	w var.	w.	.04	.06	...	59
22.	29.820	29.844	29.757	29.22	29.62	29.70	61.4	70.2	52.7	69	49	60	62	50½	sw.	nw.	.01	.04	1.41	56
23.	30.032	30.013	29.981	29.43	29.78	29.82	59.7	72.4	53.5	65	51	56	59½	50	w.	w.	.02	.02	...	52
24.	30.066	29.993	29.906	29.00	29.74	29.67	61.7	64.5	55.0	66	56	58	58	49	w.	w.	.02	.02	...	54
25.	29.814	29.774	29.646	29.24	29.58	29.59	60.3	67.4	58.5	67	54	58	64	51	s.	sw.	.07	.07	...	58
26.	29.694	29.739	29.627	29.16	29.70	29.78	58.8	70.2	56.3	66	54	61	66	53	ENE.	calm	.05	.05	...	56
27.	29.956	29.926	29.745	29.37	29.79	29.75	61.0	62.4	55.3	70	49	64	64	50½	nw.	calm	.01	.01	...	57
28.	30.084	30.078	30.019	29.47	29.84	30.00	61.7	71.4	55.6	74	58	63	65	55	sw.	calm	.01	.01	...	57
29.	30.260	30.171	30.134	29.63	30.08	30.04	64.7	71.8	60.2	75	54	65	66	45½	nw.	calm	.05	.05	...	61
30.	30.148	30.095	30.029	29.47	29.90	29.93	65.4	72.0	60.2	69	51	62½	65	58½	sw.	calm	.05	.05	0.20	60
31.	34.210	30.159	30.126	29.59	30.01	30.06	62.3	73.2	58.7	70	45	60	61	49	nw.	nw.	.01	.01	...	60
Mean.	29.921	29.898	29.780	29.30	29.650	29.644	61.5	69.8	54.9	69.35	50.77	59.9	61.1	49.4	...	...	1.68	2.76	5.28	Mean. 56.